MBNMS Permit Report August 1, 2008

MULTI-2008-003-A1 -

Effective Date: 07/01/2008 **Expiration Date:** 12/31/2013

Project Title: Marine mammal and sea turtle assessment research involving low-altitude

overflights and deployments of expendable bathythermographs from vessels.

Applicant Name: Mr. Jeremy Rusin

Affiliation: Southwest Fisheries Science Center, NMFS, NOAA

Project Summary:

The SWFSC/NMFS is conducting four projects over the next 5 years conducting overflight surveys of marine mammals and leatherback sea turtles, and discharging expendable bathythermographs (XBTS).

Location Description - Proposed:

The proposed project will be conducted along the Pacific coast in all 5 west coast sanctuaries.

Coordinates:

See hard file for detailed transect information.

Latest Event:

06/25/2008 Amendment issued

MBNMS-2008-020

Effective Date: 09/01/2008 **Expiration Date:**

Project Title: Sediment, nutrients, and contaminants from a small fluvial system to the

nearshore environment, Monterey Bay, CA

Applicant Name: Dr. Curt Storlazzi

Affiliation: U.S. Geological Survey

Project Summary:

The goal of this work is to evaluate biogeochemical aspects of sediment delivery to the shoreline and its dispersal in coastal ocean in an anthropogenically-impacted area, and in doing so address the specific science strategy goals of the USGS.

The proposed research will characterize the nearshore ecological impact of iron and particulate-associated nutrients and contaminants in suspended sediment transported by the San Lorenzo River, Santa Cruz.

Location Description - Proposed:

Approximately 0.5–2 km offshore from the mouth of the San Lorenzo River at 5, 10, and 20 meter isobaths.

Coordinates:

See map

Latest Event:

07/29/2008 Application received

<u>MBNMS-2008-019 -</u>

Effective Date: 08/01/2008 Expiration Date: 01/31/2009

Project Title: CDFG's Central Coast Marine Protected Area Monitoring and Associated

Studies

Applicant Name: Mr. Jason Vasques

Affiliation: California Department of Fish and Game

Project Summary:

As described in the CDFG application:

"The issue investigated is the effect MPAs have on species composition and relative abundance in historically fished areas. The goal of this proposal is to obtain baseline data for recently established MPAs to facilitate long term monitoring and evaluation of MPA effectiveness.

Pacific hagfish is the target of a robust, re-emerging statewide fishery. Hagfish are relatively slow growing, have a low fecundity rate, and are easily fished. Based on previous studies conducted in central California, hagfish populations may be quite large. The existing MPAs present an opportunity to survey a hagfish population recently closed to fishing and compare density levels to that of a heavily fished population.

Kelp greenling and cabezon are two of 19 finfish species included in the Department's Nearshore Fishery Management Plan (NFMP). Successful implementation of the NFMP

requires collection of missing essential fishery information (e.g. abundance

Location Description - Proposed:

The proposed area of study includes Carmel Pinnacles State Marine Reserve (SMR), Portuguese Ledge SMCA, Soquel Canyon SMCA, Lingcod Reef (north of Carmel Bay SMCA) and Yankee Point, within Point Lobos SMR), and, if time and resources permit, the Big Creek area.

With the exception of Yankee Point and Big Creek, all proposed study areas are within Monterey Bay; all are within State waters. The total surface area for all sites is 100.3km2.

Coordinates:

Latest Event:

07/24/2008 Permit issued

MBNMS-2008-018 -

Effective Date: 09/01/2008 Expiration Date: 12/31/2010

Project Title: California Lost Fishing Gear Recovery Project

Applicant Name: Dr. Kirsten Gilardi, DVM

Affiliation: UC Davis Wildlife Health Center

Project Summary:

The California Lost Fishing Gear Recovery Project requests permission to conduct up to 60 days of derelict fishing gear recovery operations within Monterey Bay National Marine Sanctuary between September 1, 2008 and December 31, 2010. The Central Coast Marine Protected Areas network will be a particular area of focus, as will the Morro Bay area between Pt. Estero and Pt. San Luis.

Monterey Bay National Marine Sanctuary has been selected as a focus area for gear location and removal as part of 2008-2010 operations because: 1) the Central Coast Marine Protected Areas network represents a significant area in which fishing is now limited or prohibited, presenting a unique opportunity to restore the seafloor to a more natural state long-term; 2) the area represents important habitat for marine species which are vulnerable to entanglement or entrapment in derelict fishing gear; 3) MBNMS is a popular recreational destination for divers, surfers, and boaters, for whom derelict fishing gear

Location Description - Proposed:

The Central Coast Marine Protected Areas network will be a particular area of focus,

Coordinates:

Latest Event:

07/11/2008 Permit issued

MBNMS-2008-017 -

Effective Date: 01/01/2009 Expiration Date: 12/31/2009

Project Title: An Investigation of Patterns in Deep-sea demersal fish metabolism and feeding

rates

Applicant Name: Dr. Jeff Drazen

Affiliation: University of Hawaii

Project Summary:

A systematic study of the metabolic rates (in situ measurements of oxygen consumption and enzymatic indicators of metabolic rate) and locomotory capacities (muscle chemical composition) of deep-sea demersal fishes will be conducted to test competing hypotheses for the first time. The first objective is to examine the depth related patterns of metabolism and locomotory capabilities of deepsea demersal fishes using both direct and biochemical indicators. The second objective is to model the feeding rates of the demersal fish community from the shelf to the abyssal plain. This will be accomplished by combining the rate information gained under objective 1 with data on the biomass and population structure of the demersal fish community from the proposed trawling effort and the literature. Methods include deploying, anchoring, and retrieving a hyperbaric fish trap respirometer, and trawling soft bottom habitats.

Location Description - Proposed:

Six study sites will be surveyed in the region of Smooth Ridge in the MBNMS: 100, 200, 500, 1000, 2000, and 4000 m depth.

Latest Event:

07/16/2008 Permit issued

MBNMS-2008-016

Effective Date: 09/01/2008 Expiration Date: 10/01/2009

Project Title: The policy, microbiology, and hydrodynamics of estuarine restoration

Applicant Name: Mr. Chris Francis

Affiliation: Stanford University

Project Summary:

The overarching goal of this project is to understand the biogeochemical and policy implications of hydrologic modifications in a salt marsh ecosystem. The present focus of most estuarine restoration projects is to negate past anthropogenic "improvements" by returning tidal action to previously leveed areas and re-constructing tidal creeks and wetlands, activities that necessarily involve moving mud. As a result the hydrologic conditions in the estuary change, due to the morphologic modifications. While water quality parameters, such as salinity, are frequently taken into consideration when defining habitat restoration goals, the importance of what is in the mud is overlooked. The majority of estuarine geochemical processes occur in sediments (i.e. mud), driven by an incredibly complex microbial community. When sediments are disturbed, either directly through restoration activity or indirectly through the resulting hydrologic modification, microbial communities are also impacted

Location Description - Proposed:

Location: The entrance to the tidal creek network is located at 36.8195° N, 121.7467° W. This location is along the western side of the main channel of Elkhorn Slough. The areal extents of the creek network are 36.8187° N to 36.8221° N and 121.7464° W to 121.7498° W.

Sampling points will be located in the thalweg of the entrance to the north and west arms of this tidal creek network. These points are roughly at 0 m elevation relative to mean lower-low water (mllw). Sampling locations have not been finalized, but will be within ~25 meters of the junction of the North and West arms of the tidal creek network. These are marine zones.

Coordinates:

Latest Event:

07/02/2008 Permit not required

MBNMS-2008-014 -

Effective Date: 08/01/2008 Expiration Date: 12/31/2008

Project Title: Collaborative Research: The Role of Canyons in Boundary Mixing and

Exchange with the Ocean Interior

Applicant Name: Dr. Erika McPhee-Shaw

Affiliation: Moss Landing Marine Laboratories

Project Summary:

The goal of the project is to examine exchange of mixed fluid between boundary and interior within a region of convergence and intense dissipation of semidiurnal internal tidal energy in the submarine canyon. Fieldwork will include use of the R/V Point Sur and the R/V John H. Martin between 17 and 31 August 2008. Profiling will be done with CTD from both ships, and with expendable CTD and current profilers (XCP-XCTD). The profiling surveys will measure semidiurnal internal wave flux throughout the water column, while a bottom-anchored mooring, deployed near the center

of the study site along the canyon axis, will monitor mixing and stratification within the bottom boundary layer and bottom mixed layer. The mooring will be in a water depth of ~ 1100 m with all instruments at depths greater than 950 m. It will be deployed 17 August 2008, and retrieved in mid-October 2008.

Location Description - Proposed:

Axis of Monterey Canyon

Coordinates:

The approximate location of the bottom-anchored mooring will be 360 46.20'N, 1220 02.15' W (exact location will be determined after surveying for flat bottom topography).

Latest Event:

06/13/2008 Permit issued

MBNMS-2008-010

Effective Date: TBD **Expiration Date:**

Project Title: BAE Systems Remote Sensing Data Collection Flight

Applicant Name: Mr. Ronald Ho

Affiliation: BAE Systems

Project Summary:

BAE Systems is trying to solve the mine detection problem in the littoral region for the US Navy, and, more specifically in this case, buried mines in the beach zone. The shoreline at Marina State Beach offers a large sandy beach environment at the ocean's edge to accommodate a target zone with available airspace to test the SAGPR system in flight.

While it is known that SAGPR can detect objects buried in dry soil, and in freshwater-moistened soil, it is unknown how effective SAGPR may be versus objects buried in wet salty sand (SAGPR is know to be ineffective versus objects submerged in pure seawater.) The goal of this task is to fly a SAPGR system over a prepared field containing mine surrogates buried in sand moistened with saltwater

Radar data collected during this test will be analyzed to characterize the performance of the SAPGR in detecting surface mines and buried mines in we (with salt water) beach sand.

Location Description - Proposed:

The proposed test range is located along the shoreline at the north end of Marina State Beach south of the wastewater treatment plant and outside of any overflight restriction zones.

Coordinates:

Latest Event:

04/09/2008 Additional information requested

MBNMS-2008-006

Effective Date: TBD Expiration Date:

Project Title: The National Water Ski Racing Association (NWSRA) race event

Applicant Name: Mr. Mark Avila

Affiliation: National Water Ski Racing Association (NWSRA)

Project Summary:

The NWSRA wants to host a major sporting event in the Monterey Bay. They propose a marathon water-ski race starting at the Monterey Wharf, to Moss Landing, to Santa Cruz, and back.

Location Description - Proposed:

Coordinates:

Latest Event:

05/07/2008 Application denied by other agency

MBNMS-2008-003

Effective Date: TBD Expiration Date:

Project Title: Caltrans Vicente Creek / Gamboa Point Retaining Wall project

Applicant Name: Mr. Richard Krumholz

Affiliation:

Project Summary:

Caltrans proposes to stabilize the failing slope between Vicente Creek and Gamboa Point from post miles 26.1 through 26.3 on Highway 1, approximately 3 miles north of the town of Lucia on the Big Sur Coast in Monterey County. The project area is an active landslide that causes disruption of traffic flow, especially during the winter months when rains increase the movement of unstable slopes. Currently maintenance crews are patching this portion of the roadway approximately two times per week. The project area has been designated as an Emergency Permanent Restoration in response to rapid and continual road failure due to the federal declared disaster event in 2006.

Caltrans is proposing to construct a 194-foot long soldier-pile tieback retaining wall along the outside shoulder of the southbound lanes using embedded steel piles with horizontal timber lagging. At it's tallest point the wall face will be 40-feet high. Piles will be encased in Portland cement and will be aesthetic

Location Description - Proposed:

Coordinates:

Latest Event:

12/21/2007 Additional information requested

MBNMS-2006-032

Effective Date: TBD Expiration Date:

Project Title: Cambria Community Services District (CCSD) Desalination Project; Proposed

Geotechnical Investigation Activities

Applicant Name: Mr. Robert Gresens

Affiliation: Cambria Community Services District

Project Summary:

The CCSD is proposing to conduct geotechnical and hydro-geological activities within the MBNMS at San Simeon State Beach as it relates to a potential future desalination facility.

An USACE EA will be prepared for this project.

Location Description - Proposed:

San Simeon State Park Beach

Coordinates:

Latest Event:

12/12/2007 Application denied by other agency

MBNMS-2006-008

Effective Date: TBD Expiration Date:

Project Title: Sink a Wreck Project

Applicant Name: Dr. Harry Wong

Affiliation: Chiropractor

Project Summary:

The proponents of this project are evaluating 5-10 sites for the sinking of a de-commissioned US Navy ship (approximately 300+ feet in length) within the MBNMS. Their ideal location would allow for a 5-10 minute boat ride, and would be within recreational diving depth.

Additional information required....

Location Description - Proposed:

tbd

Coordinates:

Latest Event:

02/23/2006 Additional information requested

MBNMS-2006-005

Effective Date: TBD Expiration Date:

Project Title: Duke Energy Moss Landing Power Plant NPDES Permit

Additional information needed

Applicant Name: RWQCB

Affiliation: Regional Water Quality Control Board

Project Summary:

Ocean discharge from the power plant. The Moss Landing Power Plant NPDES permit has been on Administrative Extension since October 2005. Water Board staff plans to propose a renewed NPDES for the facility in 2007, after the federal court issues its decision regarding litigation over Clean Water Act Section 316(b) regulations.

Also the existing permit for the MLPP is still in litigation due to a lawsuit by Voices of the Wetlands. A renewed MLPP permit will not be enacted until the courts resolve these issues.

Location Description - Proposed:

Moss Landing Power Plant Ocean Outfall

Coordinates:

Latest Event:

09/15/2006 Additional information requested